

SACO Meeting June 2006  
Mary Charles Lasater  
Vanderbilt University

This is not a formal presentation... it is a "how I do it" or "what I have learned" opening to what I hope is a sharing of ideas.

I am not a high volume SACO contributor but I do still assign LCSH terms to theses and in the course of that work run into terms that may need to be contributed. Earlier this week someone asked on Autocat: "I have run into substantial problems determining the correct subject headings in the class Q subject areas. At this moment I am struggling with a dissertation entitle... Can anyone suggest some strategies to eliminate the frustration and obtain better idease of more accurate subject headings—in a timely manner of course." I felt it was extremely timely post for this presentation.

A long time ago when I was the Monographs Librarian in our Medical Center Library, I used MeSH and NLM classification. MeSH has changed since then, however it is a tool I have used and it is very available on the Web so I find it is one of the first sources I check when I'm having trouble finding a LCSH term in a biology and/or chemistry field. We have to remember that the Library of Congress does not routinely collect or catalog theses, so SACO participants are frequently the first to encounter terms for cutting edge research in the sciences. MeSH and other indexing tools are used to index journal articles, so they have to deal with the topics first.

Sometimes though, another vocabulary list or thesaurus is most helpful in finding the appropriate term and not proposing a new LCSH term. When I am working with a chemical or biological term, if MeSH has established a term, that is a big factor in deciding to make a proposal. If there is no term set up for MeSH, I don't usually make a proposal. When working with theses and dissertations sometimes the language terms are *institution specific*, we try to avoid setting up something until it is in use at more than one institution. Sometimes MeSH indicates older terms used for the subject. LCSH may still use the term so you may need to propose and change to LCSH or a new cross reference.

Considerations: Subjects for Theses, etc.

1. Cutting edge research

Indexing/abstracting sources such as MeSH generally have to 'deal with' terms earlier than LCSH.

Increase efficiency in SACO proposals by utilizing the work that has already been done by others

2. Institution specific language

Find a 'general term' if one is available

Find another term if the term is not yet in general use

3. Generally if a term is established in MeSH, it will be a good candidate for LCSH.

Examples of SACO proposals where we used MESH

This first example was for an item for our Peabody Library that supports a strong special education department. Most of the information we needed was in the title, but MeSH allowed us to make this proposal efficiently. I like this proposal for two reasons. It took less than an hour to construct the proposal and submit it and it took about two months to get through the proposal process. Since some of the proposals I submit take much longer, I was really happy with this one. Note also that we made the proposal in 2006 but the book, for a popular audience was published in 2002.

**010** \_\_ |a sh2006001837

**040** \_\_ |a TNJ |b eng |c DLC

**150** \_\_ |a Niemann-Pick diseases

**450** \_\_ |a Lipid histiocytosis

**450** \_\_ |a Niemann-Pick disease

**450** \_\_ |a Sphingomyelin deficiency

**450** \_\_ |a Sphingomyelinase deficiency

**550** \_\_ |w g |a Reticuloendotheliosis

**550** \_\_ |w g |a Sphingolipidoses

**670** \_\_ |a Work cat.: The official parent's sourcebook on Niemann-Pick disease, c2002: |b p. 3-4 (Niemann-Pick disease is often considered a synonym or a condition closely related to the following: Lipid histiocytosis, Lipidosis, Sphingomyelin [and] Sphingomyelinase deficiency) p. 10 (patients are currently divided into 4 categories)

**670** \_\_ |a MESH browser, Mar. 11, 2006: |b (Niemann-Pick Diseases; Entry terms: Niemann-Pick Disease, Sphingomyelinase Deficiency Disease; Scope note: A group of diseases marked by autosomal recessive inheritance and accumulation of sphingomyelin in cells of the reticuloendothelial system. They are divided into 5 subtypes.)

The following proposal was for a thesis. Because theses are produced under the direction of faculty, once you encounter a new term, you can expect to see it again on other work from that lab or department. I sometimes wait until I see a term on several theses before I made a proposal.

**035** \_\_ |a (DLC)sh2004014907

**035** \_\_ |a (DLC)325315

**906** \_\_ |t 0511 |u te04 |v 0

**010** \_\_ |a sh2004014907

**040** \_\_ |a TNJ |b eng |c DLC

**150** \_\_ |a Cadherins

**550** \_\_ |w g |a Cell adhesion molecules

**550** \_\_ |w g |a Glycoproteins

**670** \_\_ |a Work cat.: Ireton, R.C. Regulation of cadherin function and turnover by P120 catenin, 2003: |b leaf 1 (Cadherins are transmembrane glycoproteins responsible for mediating cell to cell adhesion via calcium dependent homophilic interactions between cadherin molecules on adjacent cells)

**670** \_\_ |a MESH |b (Cadherins)

ARE THE TERMS USED?

The following term was proposed in 2003. I searched the LC catalog on June 3, 2006 and it was on only one bibliographic record there. We have used the term on 10 items in our catalog, mostly theses. In OCLC there are 31 with the base term only and several more with subdivisions. I searched DNA adducts as a subject browse so the results show both the MeSH and the LCSH term. I checked a few items and most are theses, some with MeSH and some with LCSH. I think using the same term for the vocabularies when we can increase 'interoperability'. See the screen prints below for the LCSH screen and the MeSH search screen in our local catalog.

**010** \_\_ |a sh2003011401

**040** \_\_ |a TNJ |b eng |c DLC

**150** \_\_ |a DNA adducts

**450** \_\_ |a Adducts, DNA

**550** \_\_ |w g |a Mutagens

**670** \_\_ |a Work cat.: Moseley, M.S. Structural studies of an acrolein DNA adduct ... 2002 |b (Acrolein is the simplest compound in a family of bis-electrophiles that react with DNA to form exocyclic adducts)

**670** \_\_ |a MESH |b (DNA Adducts; Covalent adducts between chemical mutagens and DNA. Such couplings activate DNA repair processes and, unless repaired prior to DNA replication, may lead to nucleotide substitutions, deletions, and chromosome rearrangements (Rieger et al., Glossary of Genetics: Classical and Molecular, 5th ed))

Subject LC	Heading Occurrences
DNA ADDUCTS	10
see related headings for <input type="text" value="DNA ADDUCTS"/>	
DNA ANALYSIS	25

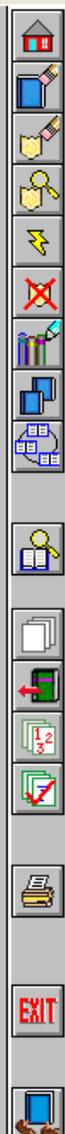
**Modify Title: Cross References for DNA ADDUCTS**

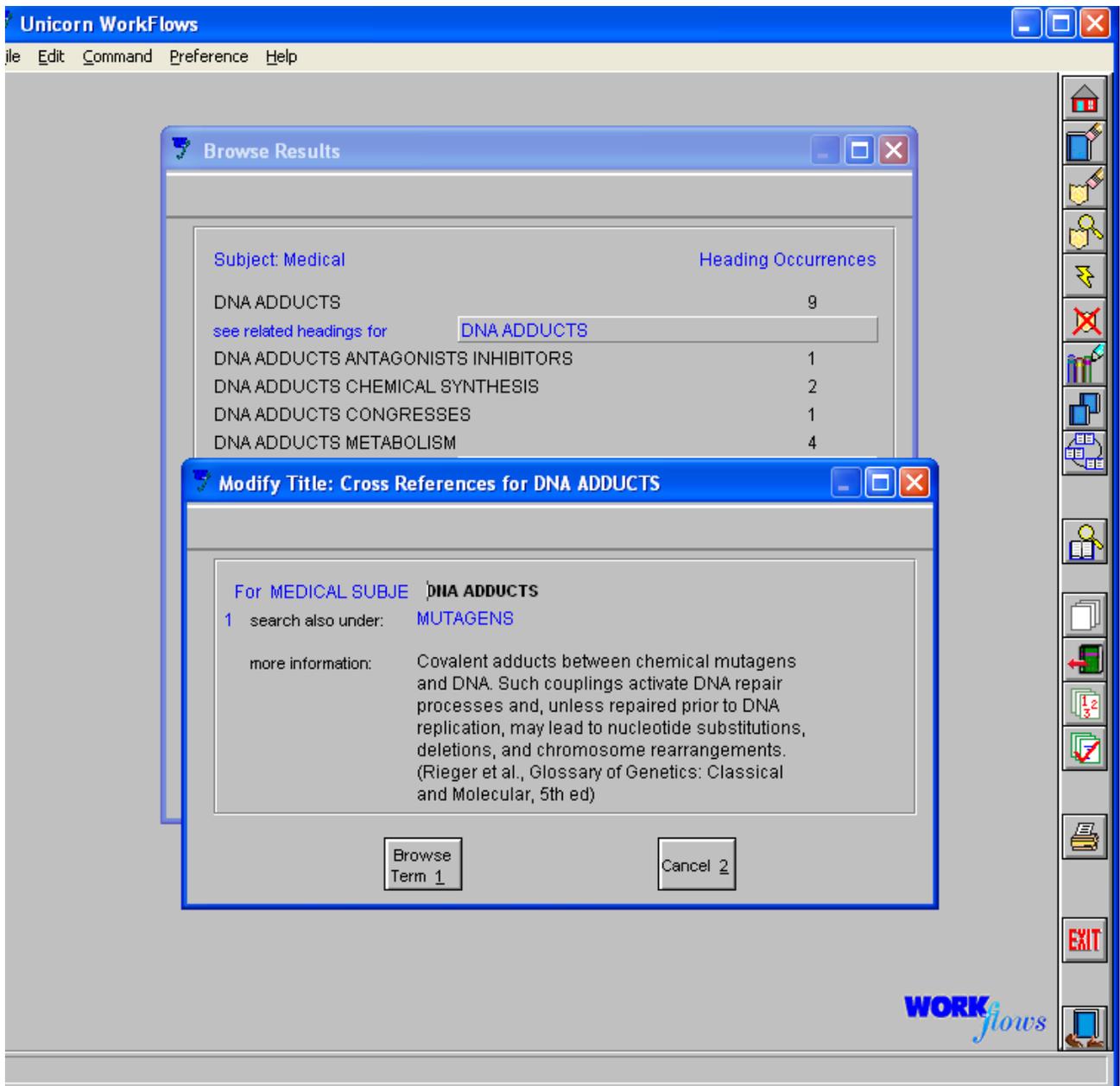
For subject **DNA ADDUCTS**

1 search also under the broader term: **MUTAGENS**

DNA CONFORMATION LABORATORY MANUALS	1
DNA CONGRESSES	14

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Scientific fields often overlap and I sometimes encounter a term that 'bothers me', one such is Molecular switches. I cataloged a title by this name and finding the 'right' heading was tough. I stuck the paperwork in my problem file and revisited it when preparing for today. I tried searching "molecular switches" online in Compendex. There I retrieved nearly 10,000 entries, but the controlled term for the ones I viewed was Molecular electronics. Then I went to IEEE explore. There I only found 14 and again Molecular electronics was the controlled term. Finally I went to ISI web of science where there were 449 hits. There the term I saw on a few was Logic circuits. I still don't have any justification for proposing a heading, but I did go back to local record and add the LCSH term Molecular electronics.

Whenever you are 'stuck', the first place to go is to the indexes in the field. With the newest subjects like theses, institutional repositories, etc. sometimes you will luck out and find the perfect term but sometimes you will find yourself struggling and using a term that doesn't make you happy.

I've also used the ERIC thesaurus, although I could have gone to the Wilson Education index before creating this record. Notice again that this book was published in 2001 and we made the proposal in 2004. The existing subjects probably included Dormitories and Universities and colleges.

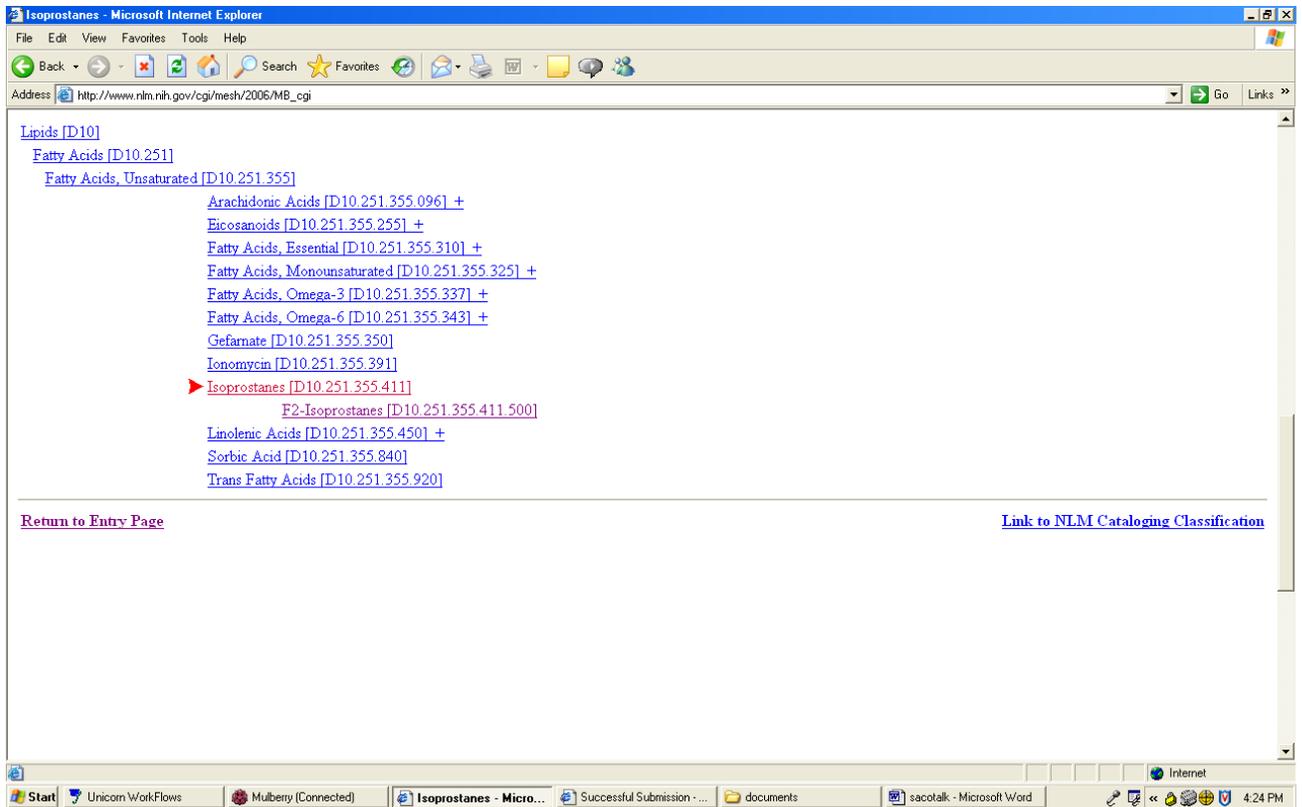
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010 sh2004005449
040 TNJ|beng|cDLC
150 Residential colleges
550 |wg|aUniversities and colleges
670 Work cat.: Ryan, M. A collegiate way of living :
    residential colleges and a Yale education, 2001.
670 ERIC thesaurus, searched Aug. 9, 2004|b(Term:
    Residential Colleges)
670 Collegiate Way web site, viewed Aug. 9,
    2004|b(The Collegiate Way seeks to improve campus
    life by dividing large universities into small,
    faculty-led communities called residential
    colleges)
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Finally, I'll walk through a proposal I made last week for Isoprostanes. The MeSH authority record and one of the tree structures is shown here. You can see the proposal on the LC Authority file and watch to see whether it approved, changed, or perhaps rejected.

The screenshot shows a web browser window titled "Isoprostanes - Microsoft Internet Explorer". The address bar shows the URL: [http://www.nlm.nih.gov/cgi/mesh/2006/MB\\_cgi](http://www.nlm.nih.gov/cgi/mesh/2006/MB_cgi). The main content area displays the "National Library of Medicine - Medical Subject Headings" page for "2006 MeSH" and "MeSH Descriptor Data". A link for "Return to Entry Page" is visible. Below this is a table with the following data:

MeSH Heading	Isoprostanes
Tree Number	<a href="#">D10.251.355.255.100.375</a>
Tree Number	<a href="#">D10.251.355.411</a>
Scope Note	A series of prostaglandin-like compounds that are produced by the attack of free-radical species on unsaturated fatty acids, especially <a href="#">ARACHIDONIC ACID</a> , of cellular <a href="#">MEMBRANES</a> . Once cleaved from the lipid membrane by the action of phospholipases they can circulate into various bodily fluids and eventually be excreted. Although these compounds resemble enzymatically synthesized prostaglandins their stereoisometric arrangement is usually different than the "naturally occurring" compounds.
Entry Term	Isoprostane
Allowable Qualifiers	<a href="#">AD</a> <a href="#">AE</a> <a href="#">AG</a> <a href="#">AI</a> <a href="#">AN</a> <a href="#">BI</a> <a href="#">BL</a> <a href="#">CF</a> <a href="#">CH</a> <a href="#">CL</a> <a href="#">CS</a> <a href="#">CT</a> <a href="#">DF</a> <a href="#">DU</a> <a href="#">EC</a> <a href="#">GE</a> <a href="#">HI</a> <a href="#">IM</a> <a href="#">IP</a> <a href="#">ME</a> <a href="#">PD</a> <a href="#">PH</a> <a href="#">PK</a> <a href="#">PO</a> <a href="#">RE</a> <a href="#">SD</a> <a href="#">SE</a> <a href="#">ST</a> <a href="#">TO</a> <a href="#">TU</a> <a href="#">UR</a>
Registry Number	0
Previous Indexing	<a href="#">Dinoprost</a> (1992-2001)
Previous Indexing	<a href="#">Lipid Peroxides</a> (1992-2001)
History Note	2002
Unique ID	D028421

The taskbar at the bottom shows several open applications: Start, Unicorn WorkFlows, Mulberry (Connected), Isoprostanes - Micro..., Successful Submission..., documents, sacotalk - Microsoft Word, and the system clock showing 4:23 PM.



1xx=150  
f1XX\_heading=Isoprostanes  
4xx=450  
f4XX\_1\_heading=IsoPs  
4xx=  
5xx=550  
f5XX\_BT1\_heading=Unsaturated fatty acids  
5xx=550  
f5XX\_BT2\_heading=Prostanoids  
sources1=Musiek, E.S. The role of cyclopentenone isoprostanes in neurodegeneration and inflammation, 2005: \$b p.13 (In 1990, a novel family of bioactive lipid peroxidation products was identified. These compounds, termed isoprostanes (IsoPs); IsoPs are prostaglandin-like compounds)  
sources2=MeSH, viewed June 16, 2006 \$b (Isoprostanes; A series of prostaglandin-like compounds that are produced by the attack of free-radical species on unsaturated fatty acids, especially ARACHIDONIC ACID, of cellular MEMBRANES. Once cleaved from the lipid membrane by the action of phospholipases they can circulate into various bodily fluids and eventually be excreted. Although these compounds resemble enzymatically synthesized prostaglandins their stereoisometric arrangement is usually different than the "naturally occurring" compounds)  
comments=MeSH tree structure shows Fatty Acids, Unsaturated as a broader term. I chose Prostanoids the BT for Prostaglandins since these are prostaglandin-like compounds.

QUESTIONS?

a) When a cataloger encounters a term that is established in a thesaurus or a subject heading list that is not found LCSH, what step(s) does the cataloger use to determine if a new LCSH term is warranted?

For example, does the cataloger search LC's OPAC to see how LC has handled this theme/topic?

b) Does the form of entry established in a thesaurus or subject heading list outside of LCSH determine in large part the form in which it is contributed to LCSH through the SACO Program?

c) How often does a cataloger encounter an established heading outside of LCSH that is represented by a different heading in LCSH OR by a topic-subdivision combination? And if so, does this discovery prompt the cataloger to submit a change proposal and/or to submit a new proposal for the topic?

d) Are terms found in a specific subject discipline thesaurus or subject heading list judged to be too narrow to contribute to LCSH? If so, what discipline, and why?